

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY FIRST SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Stephen H. Bryant, President

AG-21-14 Refer to AG-3-32(b), p. 23. Regarding the chart titled NIPSCO Meter Reading Success Rate, identify the type of meter reading devices used by NIPSCO. Provide workpapers, calculations and assumptions used by the Company to create the chart.

Response: NIPSCO relies on manual meter reading. The graph was intended to show that NIPSCO, with a very high percentage of its total meter population located on the outside of structures, could achieve a very high rate of securing meter readings each month.

The Company does not have in its possession workpapers or calculations that support these calculations.

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Responsible: Stephen H. Bryant, President

AG-21-21 Provide all reports, memorandum and analysis referring to the quality of service experienced by the Company and other utility companies regarding the Itron meter reading technology.

Response: The Company has no reports, memorandum and analysis referring to the quality of service experienced by the Company and other utility companies regarding the Itron meter reading technology. The Company does have in its possession information regarding the market share that Itron achieved in the automated meter reading market. This information shows that Itron was, at the time that the decision was made to convert the Metscan system to an Itron radio-based technology, becoming a dominant force in the automated meter reading industry, particularly for gas distribution companies.

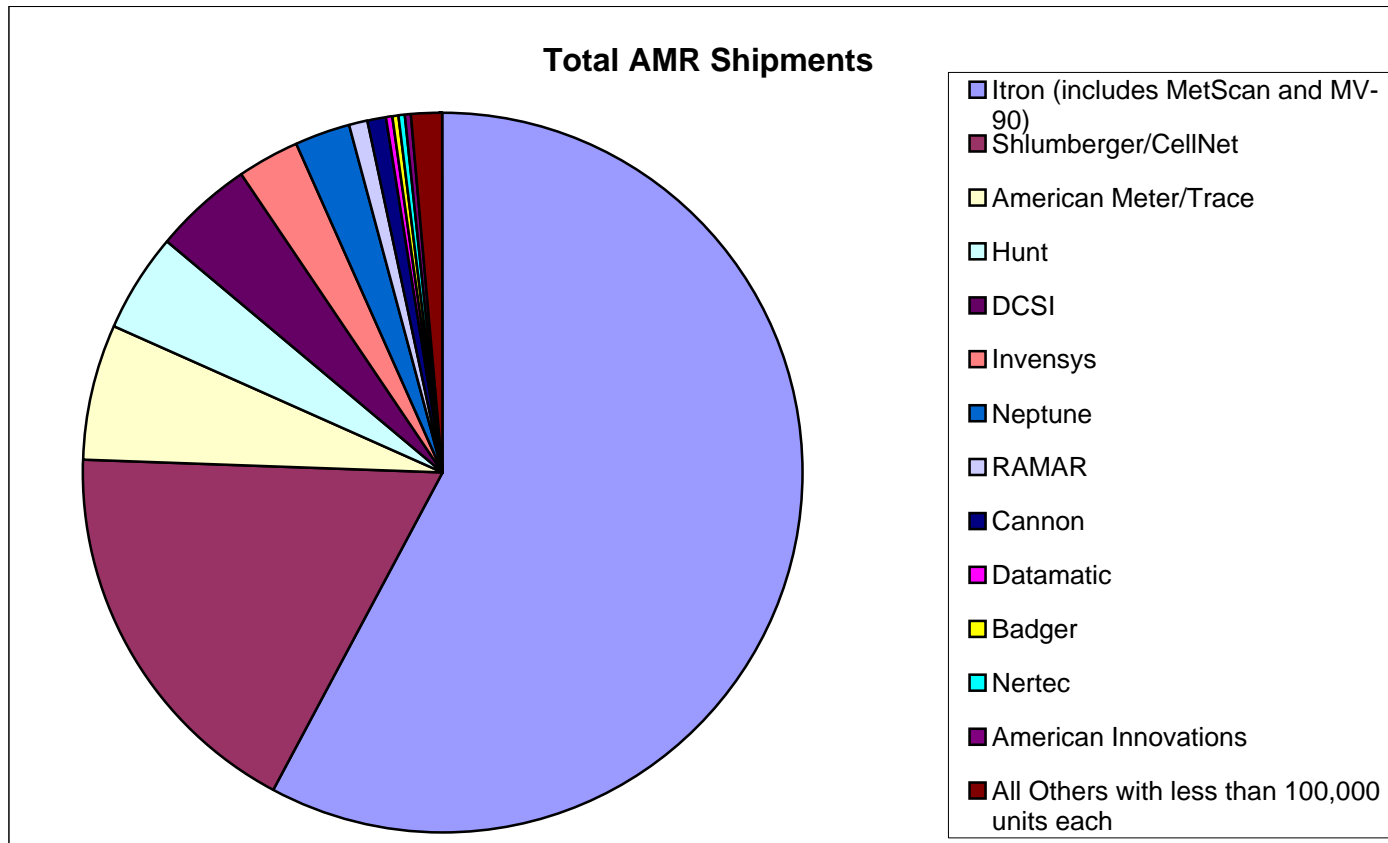
Attachment AG-21-21 (a) are excerpts from a 2001 Scott Report (AMR industry publication) that shows Itron as the dominant supplier in the gas LDC automated meter reading market.

Attachment AG-21-21 (b) is a 2003 update to the 2001 Scott Report.

Attachment AG-21-21 (c) is a list of Itron automated meter reading customers.

AMR Deployments in North America
Cumulative Shipments as of December 31, 2001
(Data per the Scott Report, 6th Edition)

Total AMR Shipments:	Units	% of Total
Itron (includes MetScan and MV-90)	23,078,893	57.7%
Shlumberger/CellNet	7,169,398	17.9%
American Meter/Trace	2,436,566	6.1%
Hunt	1,750,744	4.4%
DCSI	1,750,540	4.4%
Invensys	1,072,864	2.7%
Neptune	1,052,134	2.6%
RAMAR	356,756	0.9%
Cannon	264,870	0.7%
Datamatic	143,694	0.4%
Badger	132,517	0.3%
Nertec	121,087	0.3%
American Innovations	114,143	0.3%
All Others with less than 100,000 units each	524,694	1.3%
Total AMR Shipments	39,968,900	100.0%

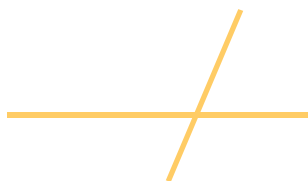


	By Manufacturer - All Markets Combined						By Architecture - All Markets Combined					
	Cumulative Thru 12/03	2003	2002	2001	2000	1999	Cumulative Thru 12/03	2003	2002	2001	2000	1999
Iron	45.3%	35.1%	37.0%	34.4%	34.8%	36.3%	55.3%	54.2%	48.7%	41.9%	44.6%	43.2%
SLB	10.1%	19.1%	11.7%	7.6%	9.3%	6.9%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%
CellNet	15.4%	8.4%	14.8%	25.3%	23.9%	29.8%	15.7%	9.1%	15.2%	25.8%	24.1%	30.0%
Hunt	4.6%	4.5%	5.3%	5.5%	5.4%	8.7%	4.6%	4.5%	5.3%	5.5%	5.4%	8.7%
DCSI	7.1%	12.7%	11.8%	8.5%	7.8%	5.9%	7.1%	12.7%	11.8%	8.5%	7.8%	5.9%
Badger	0.4%	0.7%	0.1%	0.1%	0.2%	0.2%	0.3%	0.0%	0.1%	0.1%	0.2%	0.2%
Sensus	3.1%	3.7%	3.7%	4.4%	4.3%	2.6%	3.1%	3.7%	3.7%	4.4%	4.3%	2.6%
Neptune	3.3%	4.1%	4.0%	2.8%	2.6%	1.0%	3.0%	3.5%	3.5%	2.2%	2.2%	0.7%
Ramar	1.6%	2.3%	3.2%	2.9%	2.1%	0.7%	1.6%	2.3%	3.2%	2.9%	2.1%	0.7%
Amco/Elster	5.2%	3.6%	3.1%	5.3%	6.4%	6.2%	5.2%	3.5%	3.1%	5.3%	6.4%	6.2%
Hexagram	1.0%	1.9%	2.2%	0.7%	0.8%	0.4%	1.0%	1.9%	2.2%	0.7%	0.8%	0.4%
Master Meter	0.3%	1.4%	0.1%	0.0%	0.0%	0.0%	0.3%	1.4%	0.1%	0.0%	0.0%	0.0%
Datamatic	0.7%	1.6%	1.3%	1.0%	0.9%	0.1%	0.7%	1.6%	1.3%	1.0%	0.9%	0.1%
All Others	1.9%	0.9%	1.7%	1.6%	1.7%	1.3%	2.0%	1.6%	1.7%	1.5%	1.5%	1.3%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	By Manufacturer - Electric						By Architecture - Electric					
	Cumulative Thru 12/03	2003	2002	2001	2000	1999	Cumulative Thru 12/03	2003	2002	2001	2000	1999
Iron	31.1%	21.8%	28.2%	31.9%	27.7%	15.0%	50.6%	56.6%	48.8%	44.5%	47.1%	26.1%
SLB	19.9%	34.7%	20.6%	12.6%	19.4%	11.1%	0.4%	0.0%	0.0%	0.2%	0.0%	0.0%
CellNet	23.5%	10.8%	19.1%	30.2%	23.2%	46.0%	23.6%	10.8%	19.1%	30.2%	23.2%	46.0%
Hunt	9.0%	8.2%	9.4%	9.4%	11.2%	14.1%	9.0%	8.2%	9.4%	9.4%	11.2%	14.1%
DCSI	13.6%	22.9%	20.6%	13.3%	15.6%	9.5%	13.6%	22.9%	20.6%	13.3%	15.6%	9.5%
Badger	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sensus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Neptune	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ramar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Amco/Elster	0.3%	0.5%	0.5%	0.5%	0.6%	0.6%	0.3%	0.4%	0.5%	0.5%	0.6%	0.6%
Hexagram	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Master Meter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Datamatic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
All Others	2.6%	1.0%	1.7%	2.0%	2.4%	1.8%	2.6%	1.1%	1.7%	2.0%	2.4%	1.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	By Manufacturer - Gas						By Architecture - Gas					
	Cumulative Thru 12/03	2003	2002	2001	2000	1999	Cumulative Thru 12/03	2003	2002	2001	2000	1999
Iron	80.6%	75.1%	72.3%	48.4%	47.4%	92.6%	80.7%	75.1%	72.3%	48.6%	48.3%	93.0%
SLB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CellNet	11.5%	12.2%	19.6%	37.3%	41.5%	0.0%	11.5%	12.2%	19.6%	37.3%	41.5%	0.0%
Hunt	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DCSI	0.5%	0.6%	0.2%	3.3%	1.2%	0.0%	0.5%	0.6%	0.2%	3.3%	1.2%	0.0%
Badger	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sensus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Neptune	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ramar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Amco/Elster	6.1%	9.3%	5.5%	9.5%	8.8%	6.5%	6.1%	9.3%	5.5%	9.5%	8.8%	6.5%
Hexagram	0.3%	2.5%	0.0%	0.0%	0.0%	0.0%	0.3%	2.5%	0.0%	0.0%	0.0%	0.0%
Master Meter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Datamatic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
All Others	1.0%	0.4%	2.4%	1.5%	1.1%	0.9%	0.8%	0.4%	2.4%	1.3%	0.2%	0.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

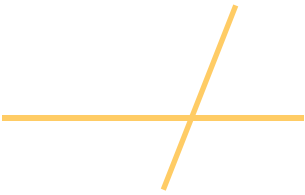
	By Manufacturer - Water						By Architecture - Water					
	Cumulative Thru 12/03	2003	2002	2001	2000	1999	Cumulative Thru 12/03	2003	2002	2001	2000	1999
Iron	29.3%	31.7%	28.4%	28.4%	32.4%	47.8%	29.4%	31.7%	28.4%	28.4%	33.4%	47.9%
SLB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CellNet	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	2.7%	2.0%	2.5%	0.9%	1.3%
Hunt	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DCSI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Badger	1.9%	2.7%	0.5%	0.3%	0.8%	0.9%	1.3%	0.2%	0.5%	0.2%	0.8%	0.8%
Sensus	16.0%	15.1%	16.2%	21.2%	20.2%	14.2%	16.0%	15.1%	15.2%	21.2%	20.2%	14.2%
Neptune	16.7%	16.8%	17.2%	13.2%	12.4%	5.2%	15.1%	14.1%	16.2%	10.7%	10.5%	3.9%
Ramar	8.1%	9.2%	13.7%	13.6%	9.9%	3.6%	8.1%	9.2%	13.7%	13.6%	9.9%	3.6%
Amco/Elster	16.5%	5.7%	7.5%	14.8%	15.9%	25.3%	16.5%	5.7%	7.5%	14.8%	15.9%	25.3%
Hexagram	4.4%	5.8%	9.5%	3.3%	2.9%	2.3%	4.4%	5.8%	9.5%	3.3%	2.9%	2.3%
Master Meter	1.4%	5.6%	0.2%	0.0%	0.0%	0.1%	1.4%	5.6%	0.2%	0.0%	0.0%	0.0%
Datamatic	3.8%	6.3%	5.8%	4.9%	4.3%	0.3%	3.8%	6.3%	5.8%	4.9%	4.3%	0.3%
All Others	1.8%	1.1%	1.0%	0.3%	1.1%	0.3%	2.4%	3.6%	1.0%	0.4%	1.1%	0.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Itron OMR Customers

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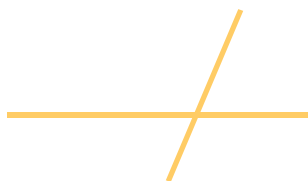
ACCENTURE BUSINESS SERVICES	BAY STATE GAS
ALAMEDA POWER AND TELECOM	BEAR VALLEY ELECTRIC SERVICE
ALBANY WATER, GAS & LIGHT	BEAUFORT COUNTY WATER (NC)
ALBEMARLE EMC	BHC COMPANY
ALLIANT ENERGY	BLACKSTONE DPW (MA)
ALLIANT ENERGY/IPL UTILITIES	BLUE RIDGE EMC
ALLIANT ENERGY/WISCONSIN POWER & LIGHT	BLUEWATER POWER DISTRIBUTION CORP.
ALTAMAHA EMC	BOROUGH OF GLEN GARDNER
AMCO WATER METERING SYSTEMS	BOUNTIFUL CITY LIGHT & POWER
AMERICAN WATER	BRANTFORD HYDRO
AMR DATA CORPORATION (MA)	BRAZEAU COUNTY (AB)
ANCHORAGE MUNICIPAL LIGHT & POWER	BRIGHAM CITY CORPORATION
APEX, TOWN OF	BROAD RIVER EC
APPALACHIAN WATER INC (GA)	BROOKFIELD, CITY OF (WI)
AQUILA	BROWN COUNTY RURAL WATER
AQUILA NETWORKS CANADA	BROWNSVILLE (TX) PUB
ARCADE, VILLAGE OF (NY)	BURLINGTON ELECTRIC (VT)
ARIZONA PUBLIC SERVICE	C3 COMMUNICATIONS INC.
ARKANSAS WESTERN GAS (AR)	CAMPBELLSVILLE WATER & SEWER
ATLANTA GAS LIGHT COMPANY	CANADIAN NIAGARA POWER INC.
ATMOS ENERGY / TEXAS DIVISION	CANANDAIGUA-FARMINGTON WATER
ATMOS ENERGY CORPORATION	CANOOCHEE EMC
AURORA HYDRO (ONTARIO)	CAPAMA (ACUPULCO)
AUSTIN UTILITIES (MN)	CARIBBEAN UTILITIES COMPANY
AVISTA UTILITIES (WP NATURAL)	CAROLINA METER & SUPPLY
BADGER METER C/O CITY OF WAUWA	CENTENNIAL WATER & SAN DISTRICT
BADGER METER C/O EDINBURG MUNICIPALITY	CENTERPOINT ENERGY - MINNEGASCO
BADGER METER CO	CENTERVILLE-OSTERVILLE-MARSTON
BALTIMORE GAS & ELECTRIC	CENTRA-HYDRO ENERGY
BARNEGAT TOWNSHIP (NJ)	CENTRAL ARKANSAS WATER (AR)
BARRIE PUBLIC UTILITIES (ONTARIO)	CENTRAL ELECTRIC COOPERATIVE
	CENTRAL FLORIDA GAS COMPANY



Itron OMR Customers

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CENTRAL GEORGIA EMC	CITY OF BURBANK
CENTRAL HUDSON GAS & ELECTRIC CORP.	CITY OF CARTERSVILLE, (GA)
CENTRAL INSTALLATION (PA)	CITY OF CASPER (WY)
CENTRAL MAINE POWER	CITY OF CERRITOS
CENTRAL NEW MEXICO ELECTRIC	CITY OF CHANDLER (AZ)
CENTRAL POWER & LIGHT	CITY OF CHARLOTTESVILLE
CENTRAL SERVICE ASSOC (CSA)	CITY OF CHENEY
CENTRE WELLINGTON HYDRO (ON)	CITY OF CHESAPEAKE (VA)
CHAMPLIN, CITY OF	CITY OF COLTON
CHARLOTTE/MECKLENBURG UTILITIES	CITY OF COLUMBIA
CHASE SERVICE CENTER FACILITY	CITY OF COLUMBUS
CHATHAM-KENT HYDRO (ON)	CITY OF CUSTER (SD)
CHELAN COUNTY PUD (WA)	CITY OF DENTON (TX)
CHELCO SERVICES INC	CITY OF DES PLAINES (IL)
CHELSEA LIGHT & WATER DEPARTMENT	CITY OF DEWITT (IA)
CHEROKEE VILLAGE WATERWORKS	CITY OF DOTHAN
CHESAPEAKE UTILITIES (DE)	CITY OF DOVER (DE)
CHICAGO CITY OF/INDUS UTILITY	CITY OF EAST POINT
CHICOPEE ELECTRIC LIGHT DEPT.	CITY OF EDEN PRAIRIE
CHISHOLM TRAIL SUD	CITY OF ELBERTON
CINERGY CORPORATION	CITY OF FORT COLLINS (CO)
CITIZENS GAS FUEL COMPANY	CITY OF FORT MYERS (FL)
CITY OF AKRON (OH)	CITY OF FORT WAYNE (IN)
CITY OF ALBANY (MN)	CITY OF FOUNTAIN (CO)
CITY OF AMORY UTILITIES (MS)	CITY OF GAFFNEY (SC)
CITY OF ARCADIA (WI)	CITY OF GAINESVILLE (FL)
CITY OF ASHLAND	CITY OF GARLAND
CITY OF AVON PARK (FL)	CITY OF GLENCOE (MN)
CITY OF AVONDALE	CITY OF GLENDALE (CA)
CITY OF BERNALILLO (NM)	CITY OF GOTHENBURG (NE)
CITY OF BEVERLY	CITY OF GREENSBORO (NC)
CITY OF BORDENTOWN, (NJ)	CITY OF HARVEY (IL)
CITY OF BOWLING GREEN (OH)	CITY OF HICKORY (NC)
	CITY OF HILLSBORO (WI)



Itron OMR Customers

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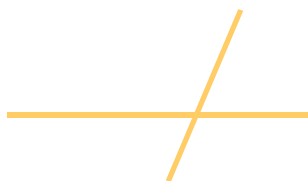
CITY OF HOUSTON PUBLIC UTILITIES	CITY OF SANDWICH
CITY OF JEFFERSONVILLE (KY)	CITY OF SANFORD
CITY OF KANSAS CITY (KS)	CITY OF SEAFORD (DE)
CITY OF KASSON UTILITIES	CITY OF SHELBY (NC)
CITY OF KENNETT LIGHT, GAS & WATER	CITY OF SILOAM SPRINGS (AR)
CITY OF KINSTON (NC)	CITY OF SMITHVILLE (MO)
CITY OF LAKE CITY PUBLIC UTILITIES	CITY OF SPARKS (NV)
CITY OF LAWRENCE	CITY OF SPOKANE (WA)
CITY OF LEESBURG	CITY OF ST. MICHAEL (MN)
CITY OF LINCOLN (NE)	CITY OF SULLIVAN (MO)
CITY OF LOMPOC (CA)	CITY OF UNION (SC)
CITY OF LONG BEACH (NY)	CITY OF VALDEZ (AK)
CITY OF LONGMONT	CITY OF WAUCHULA (FL)
CITY OF MANKATO, MN	CITY OF WEST PLAINS (MO)
CITY OF MARIETTA (GA)	CITY OF WESTLAKE (LA)
CITY OF MARYVILLE	CITY OF WILMINGTON (DE)
CITY OF MESA	CITY OF WOODHAVEN (MI)
CITY OF MINNEAPOLIS WATER WORKS	CITY OF WOONSOCKET WATER DEPT.
CITY OF MONROE (NC)	CITY UTILITIES OF SPRINGFIELD
CITY OF MOORESVILLE (NC)	CLAY ELECTRIC COOPERATIVE (FL)
CITY OF NAPA (CA)	CLAYTON COUNTY WATER AUTHORITY
CITY OF NEW MARKET (MN)	CLECO CORPORATION
CITY OF OLATHE (KS)	COBB EMC (GA)
CITY OF OSAGE CITY (KS)	COLDWATER BOARD OF PUBLIC UTILITIES
CITY OF OSSEO (MN)	COLLIER COUNTY UTILITIES
CITY OF OTTAWA (KS)	COLORADO NATURAL GAS
CITY OF PEORIA	COLUMBIA RIVER PUD
CITY OF PHILADELPHIA	COLUMBUS ELECTRIC
CITY OF PLAINVIEW (NE)	COMMISSION OF PUBLIC WORKS
CITY OF PLANT CITY (FL)	COMMONWEALTH EDISON
CITY OF POSEN	COMPUTER SOFTWARE INC.
CITY OF PRESCOTT (AZ)	CONECTIV/DELMARVA POWER & LIGHT
CITY OF RIVERSIDE	
CITY OF ROSEVILLE	



Itron OMR Customers

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CONNECTICUT LIGHT & POWER CO.	ENDICOTT MUNICIPAL LIGHT
CONNEXUS ENERGY	DEPARTMENT
CONNEXUS ENERGY (ANOKA, MN)	ENERGY NORTH NATURAL GAS INC.
CONSUMERS OHIO WATER COMPANY	ENMAX POWER CORP
CONSUMERS PENNSYLVANIA WATER	ENTEX
CONTINENTAL DIVIDE ELECTRIC CO	EPCOR POWER GENERATION
CRAWFORDSVILLE ELECTRIC L&P	EQUITABLE GAS
CUCAMONGA VALLEY WATER	FAIRVIEW
DISTRICT	FALL RIVER GAS COMPANY
CUMBERLAND WATER DEPT (RI)	FARMINGTON UTILITIES (NM)
CUNNINGHAM UTILITY DISTRICT	FAYETTEVILLE ELECTRIC
DAFFRON & ASSOCIATES, INC.	FAYETTEVILLE PWC (NC)
DAKOTA ELECTRIC ASSOCIATION	FERGUSON ENTERPRISES, INC.
DECATUR UTILITIES (AL)	FESTIVAL HYDRO (ONTARIO)
DELAWARE COUNTY RURAL WATER	FIRST ENERGY CORP.
DENVER WATER BOARD	FLEMING-MASON ENERGY
DEPARTMENT OF PUBLIC SERVICE	FLINT EMC (GA)
DEPTFORD MUA	FLORENCE UTILITY COMMISSION
DETROIT EDISON	FLORIDA CITY GAS CO.
DOMINION VIRGINIA POWER	FLORIDA POWER CORPORATION
DOUGLAS, CITY OF (GA)	FLORIDA WATER SERVICE
DOWAGIAC DEPARTMENT OF PUBLIC	FOREST CITY, TOWN OF
DUKE ENERGY CORPORATION	FORT HILL NATURAL GAS
EASLEY COMBINED UTILITY SYSTEM	FRANKLIN, CITY OF (VA)
EAST BAY MUNICIPAL UTILITIES	FRENCHBURG
EASTON UTILITIES (MD)	GAINESVILLE REGIONAL UTILITIES
EASTON WINWATER WORKS (MA)	GALLATIN DEPT OF ELECTRICITY (TN)
EDMOND, CITY OF	GAZ METROPOLITAIN
ELIZABETHTOWN GAS COMPANY	GEORGIA POWER
ELK RIVER (MN)	GILA RESOURCES (AZ)
ELMHURST MUTUAL POWER & LIGHT	GLADSTONE POWER & LIGHT (MI)
ELSTER METERING (ONTARIO)	GOLDEN VALLEY ELECTRIC ASSOC.
EMPIRE ELECTRIC ASSOCIATION	GRAHAM COUNTY ELECTRIC
	COOPERATIVE



Itron OMR Customers

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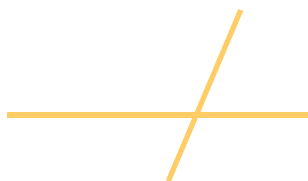
GRAND BAHAMAS WATER	KAUAI ELECTRIC COMPANY
GRAND FORKS, CITY OF	KERRVILLE PUBLIC UTILITIES
GREATER DICKSON GAS AUTHORITY	KETCHIKAN PUBLIC UTILITIES
GREENEVILLE LIGHT AND POWER SYSTEM	KEY WEST CITY ELECTRIC
GREENFIELD POWER & LIGHT (IN)	KEYSPAN ENERGY
GREENVILLE UTILITIES COMMISSION	KISSIMMEE UTILITY AUTHORITY
GREENWOOD COMMISSIONERS OF PUBLIC UTILITIES	KIT CARSON ELECTRIC COOPERATIVE
GREYSTONE POWER CORPORATION	KITCHENER WILMOT (ON)
GROENIGER COMPANY (CA)	KNOX COUNTY WATER DEPT. (IN)
GULF COAST ELECTRIC COOPERATIVE	KNOXVILLE UTILITY BOARD
HALTON HILLS HYDRO-ELECTRIC COMMISSION	LAFAYETTE UTILITIES SYSTEM (LA)
HAMILTON HYDRO INC (ON)	LANCASTER AREA SEWERAGE
HARFORD COUNTY DPW (MD)	LAUDERDALE COUNTY WATER SYSTEM
HARFORD COUNTY GOVERNMENT WATER & SEWER	LAURENS ELECTRIC COOPERATIVE
HENDRICKS POWER COOPERATIVE	LAWRENCEBURG MUNICIPAL UTILITIES
HERSEY METERS	LAFAYETTE CONSOLIDATED GOVERNMENT
HOLDEN MUNICIPAL LIGHT (MA)	LEE COUNTY ELECTRIC COOPERATIVE
HOWARD COUNTY	LEE'S SUMMIT, CITY OF
HUDSON LIGHT & POWER DEPARTMENT	LICKING RURAL ELECTRIC (OH)
HUNTERSVILLE ELECTRIC (NC)	LINCOLN ELECTRIC SYSTEM
HUNTINGDON WATER & SEWER (KY)	LITCHFIELD PUBLIC UTILITIES
HYDRO METERING TECHNOLOGY	LITTLETON WATER & LIGHT DEPT.
HYDRO SPECIALTIES COMPANY	LOCKHART POWER COMPANY
IMPERIAL IRRIGATION DISTRICT	LOGAN CITY
INTERMOUNTAIN RURAL ELECTRIC	LOS ANGELES DEPT. OF WATER & POWER (LADWP)
INTRALYNX	LOS OSOS COMMUNITY SERVICES DISTRICT
INVENSYS ENERGY METERING	LOUISVILLE GAS & ELECTRIC CO.
JACKSON ENERGY AUTHORITY	LOUISVILLE UTILITIES
JACKSONVILLE ELECTRIC AUTHORITY	LOUISVILLE WATER COMPANY
JONES-ONSLOW EMC	LOWER VALLEY ENERGY
	MADISON ELECTRIC WORKS (ME)
	MAGIC VALLEY ELECTRIC



Itron OMR Customers

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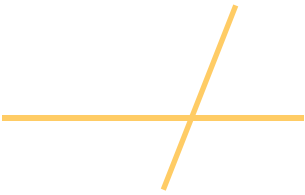
MANASSAS, CITY OF	NEW ULM PUBLIC UTILITIES
MANITOWOC PUBLIC UTILITIES (WI)	NEWARK, CITY OF (DE)
MARIN MUNICIPAL WATER DISTRICT (CA)	NEWBERRY ELECTRIC COOPERATIVE
MARSHALL MUNICIPAL UTILITIES (MO)	NEWFOUNDLAND POWER
MASHPEE WATER (MA)	NEWMARKET HYDRO
MASHPEE WATER DISTRICT	NEWPORT UTILITIES
MCCALL WATER SYSTEMS (AL)	NORTHERN INDIANA PUBLIC SERVICES COMPANY (NIPSCO)
MCFARLAND WATER & SEWER (WI)	NORRIS PPD (NE)
MEMPHIS LIGHT GAS & WATER	NORTH ATTLEBOROUGH ELECTRIC
MERRIMACK VILLAGE DISTRICT	NORTH CAROLINA GAS SERVICE
METROPOLITAN DOMESTIC WATER	NORTH GEORGIA EMC
METROPOLITAN UTILITIES DISTRICT	NORTH LIBERTY (IN)
MICHIGAN CONSOLIDATED GAS CO.	NORTH LITTLE ROCK ELECTRIC DEPT.
MIDAMERICAN ENERGY COMPANY	NORTH TAHOE PUD
MIDDLE TENNESSEE NATURAL GAS	NORTHERN VIRGINIA ELECTRIC
MIDWEST METERS, INC.	NORTHWEST NATURAL GAS COMPANY
MILFORD, CITY OF	NORTHWESTERN ENERGY
MONROE MUNICIPAL UTILITIES AUTHORITY	NORTHWESTERN RURAL ELECTRIC
MONTANA-DAKOTA UTILITIES	NSTAR
MOUNTAIN STATES PIPE & SUPPLY CO.	NUI/ELIZABETHTOWN GAS CO
MT LAUREL WATER POLLUTION (NJ)	O & S WATER CO. INC.
NARRAGANSETT WATER DEPARTMENT	OCOEE UTILITY DISTRICT (TN)
NATIONAL GRID	OKEFENOKE RURAL EMC
NATIONAL METERING	OKLAHOMA NATURAL GAS
NATIONAL WATERWORKS, INC. (MI)	OLATHE, CITY OF
NEBRASKA CITY UTILITIES	OLD BRIDGE MUNICIPAL UTILITIES
NEBRASKA PUBLIC POWER DISTRICT	ORANGE & ROCKLAND UTILITY
NEW BRAUNFELS UTILITIES	OREGON TRAIL ELECTRIC COOPERATIVE
NEW BRUNSWICK POWER CORP.	OWATONNA PUBLIC UTILITIES (MN)
NEW COMMONWEALTH NATURAL GAS CO.	OWEN ELECTRIC
NEW ENGLAND GAS COMPANY	PACIFIC GAS AND ELECTRIC
NEW JERSEY NATURAL GAS CO.	PARAGOULD CITY LIGHT & WATER



Itron OMR Customers

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PAXTON WATER DEPARTMENT	ROHNERT PARK / VINTAGE WATER
PAYSON, CITY OF	WORKS
PEACE RIVER ELECTRIC COOPERATIVE	RURAL MUNICIPALITY OF RITCHOT
PEARL RIVER VALLEY EPA	RUSSELLVILLE ELECTRIC PLANT
PEE DEE EMC	RUTHERFORD EMC
PEOPLES GAS SYSTEM/TAMPA	SALEM ELECTRIC
ELECTRIC	SAN ANTONIO, CITY PUBLIC SERVICES
PERENNIAL PUBLIC POWER DISTRICT	OF
PG ENERGY	SAN DIEGO GAS & ELECTRIC
PHILADELPHIA GAS WORKS	SAN DIEGO WATER
PHILADELPHIA SUBURBAN WATER CO.	SAN ISABEL ELECTRIC
PIEDMONT EMC	SAN JOSE WATER COMPANY
PIEDMONT NATURAL GAS	SANTEE COOPER
PIONEER ELECTRIC COOPERATIVE (AL)	SARASOTA COUNTY
PLAINVILLE WATER & SEWER (MA)	SCANA SERVICES, INC.
PLYMOUTH WATER COMPANY (MA)	SCHLUMBERGER SEMA
POLK COUNTY RPPD (NE)	SCHLUMBERGER-RMS/SERVICE
PORTLAND GENERAL ELECTRIC	DIVISION
PORTSMOUTH REDEVELOPMENT & HSG	SCHOFIELD US ARMY BASE
PROVIDENCE WATER	SCHUYLER DEPT OF UTILITIES
PROVO CITY ENERGY DEPT.	SEATTLE CITY LIGHT
PUBLIC SERVICE ELECTRIC & GAS	SEATTLE PUBLIC UTILITIES
PUBLIC SERVICE OF NEW MEXICO	SECURITY WATER DISTRICT
PUC SERVICES INC.	SIERRA PACIFIC POWER COMPANY
RAPPAHANNOCK ELECTRIC	SINGING RIVER ELECTRIC POWER
COOPERATIVE	AUTHORITY
READING MUNICIPAL LIGHT DEPT.	SMYRNA, TOWN OF (DE)
RED HED SUPPLY	SNAPPING SHOALS EMC
REED CITY POWER LINE COMPANY	SNOHOMISH PUD
RELIANT ENERGY-HOUSTON	SOUTH EASTERN WATER ASSOC. (KY)
RELIANT ENERGY-ARKLA GAS	SOUTH HUNTINGTON WATER DISTRICT
RICHMOND POWER & LIGHT	SOUTH NORWALK ELECTRIC WORKS
RMR SERVICES LLC	SOUTHEASTERN DATA COOPERATIVE
ROCHESTER PUBLIC UTILITIES (MN)	SOUTHERN CALIFORNIA EDISON
	SOUTHERN CALIFORNIA WATER



Itron OMR Customers

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SOUTHERN INDIANA GAS & ELECTRIC	TURKEY CANON RANCH WATER CO.
SOUTHWEST GAS CORP.	TURLOCK IRRIGATION DISTRICT
SOUTHWEST LOUISIANA EMC (LA)	TXU GAS & ELECTRIC/LONE STAR
SPANISH FORK CITY (UT)	UNION, CITY OF
STEARNS ELECTRIC (MN)	UNION COUNTY PUBLIC WORKS
STOUGHTON DEPARTMENT OF PUBLIC WORKS	UNION POWER COOPERATIVE (NC)
STRAWBERRY ELECTRIC SERVICE	UNITED ELECTRIC COOPERATIVE SERVICES
SUDBURY HYDRO	UNITED METERING, INC. (DE)
SUMTER ELECTRIC COOPERATIVE (FL)	UNITED SYSTEMS & SOFTWARE
SUNNYSLOPE, COUNTY OF	UNITIL SERVICE CORPORATION
SUNNYVALE, CITY OF	UNITIL-FITCHBURG GAS & ELECTRIC
TAMPA ELECTRIC COMPANY	UPSON EMC
TARBORO, TOWN OF	URB, DIVISION OF OLAMETER
TERASEN GAS/BC GAS UTILITY LTD.	U.S. FILTER
THORNTON, CITY OF	UTAH GAS SERVICE COMPANY
TIDELAND EMC	VAUGHAN HYDRO (ONTARIO)
TOMBIGBEE ELECTRIC COOPERATIVE	VECTREN
TOWN OF CHATHAM WATER & SEWER	VERMONT GAS
TOWN OF CRENSHAW (MS)	VIASTAR ENERGY
TOWN OF DALE (IN)	VICTOR VALLEY WATER DISTRICT
TOWN OF ESTES PARK	VILLAGE OF CHATHAM (IL)
TOWN OF MIDDLETOWN (DE)	VILLAGE OF EAST DUNDEE (IL)
TOWN OF RANGELY (CO)	VILLAGE OF LODI WATER & LIGHT
TOWN OF RICHFORD WATER DEPT.	VILLAGE OF MANTENO (IL)
TOWN OF SOUTH HADLEY ELECTRIC	VILLAGE OF WELLSVILLE (NY)
TOWN OF WINDSOR (CA)	VINTAGE WATER WORKS (CA)
TOWNSHIP OF PEQUANNOCK (NJ)	VIRGINIA NATURAL GAS/AGL
TRI COUNTY ELECTRIC MEMBERSHIP CORP.	VIRGINIA POWER
TRICO ELECTRIC COOPERATIVE (AZ)	WAKE EMC
TRINIDAD/TOBAGO ELECTRIC COMM.	WALTON EMC
TUCSON ELECTRIC POWER CO.	WATER PRODUCTS COMPANY
TURF MOBILE HOME COMMUNITY (NY)	WAYNE, CITY OF (NE)



Itron OMR Customers

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WELLINGTON NORTH HYDRO
(ONTARIO)
WEST CENTRAL ELECTRIC
COOPERATIVE
WEST TEXAS UTILITIES
WESTAR ENERGY
WESTERN WATER COMPANY (OH)
WHEATLAND ELECTRIC (KS)
WHITE COUNTY REMC
WHITLEY COUNTY WATER DISTRICT
WINNIPEG WATER
WOLSELEY CANADA INC. (BC)
WORTHINGTON PUBLIC UTILITIES
WR WHITE SUPPLY (UT)
XCEL ENERGY
YAZOO VALLEY EPA
YORK COUNTY NATURAL GAS
YORK ELECTRIC COOPERATIVE (SC)

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY FIRST SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Stephen H. Bryant, President

AG-21-22 Provide all company memoranda relating to the Company's RFP issued prior to deciding to deploy the Itron technology. Identify all other meter reading technology available to the Company when it made the decision to deploy the Itron meter reading system.

Response: The Company did not issue an RFP for automated meter reading technology. Rather, the Company negotiated directly with Itron to develop an agreement that would provide favorable terms for continuing technical support for the Metscan system until it could be taken out of service and favorable pricing terms for the replacement system.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-THIRD SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-22-49 Please provide the Company's policy and all applicable regulations relating to leak classification. Please identify (a) the number of leaks that were identified as class 2 leaks during the past 5 years: (b) the number of leaks that were reclassified as class 2 leaks during the past 5 years. Please provide explanations for all reclassifications.

Response: The Company's policy relating to leak classification is provided for in its Operating & Maintenance (O&M) Procedure Manual in O&M Procedure 14.05 (attached). Although there are no specific federal regulations requiring a local distribution company (LDC) to classify its leaks, 49 CFR Part 192.703 of the minimum federal safety standards states that hazardous leaks must be repaired promptly. Furthermore 49 CFR Part 192.615(a)(3) requires the LDC to establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for prompt and effective response to a gas detected inside or near a building. Although there are no specific state regulations requiring an LDC to classify its leaks, 220 CMR 101.01 requires an LDC to follow the minimum federal safety standards, namely Part 192. Furthermore, state regulation 220 CMR 101.06(21) requires that all disclosed conditions of a nature hazardous to persons or property shall be promptly made safe and permanent repairs instituted. Therefore, to satisfy the intent of the regulations, the Company, after investigating all gas leaks, classifies all gas leaks as Class 1, 2, or 3 as defined in its O&M Procedure 14.05.

During the past five years, from January 1, 2000 through December 31, 2004, the Company identified 7,309 Class 2 leaks. As of December 31, 2004, 7,305 had been repaired 4 were pending repair. Although the Company's procedure provides for and permits reclassification of any leak. the Company's Work Order Management System (WOMS) neither tracks nor tallies the number of leaks that were reclassified from Class 2 to Class 1 or 3. When leaks are reclassified, the reason for the reclassification may or may not be captured in a "Comments" section within the WOMS work order. Consequently, even a manual review of five years worth of comments in the Comments section of each work order may not provide an accurate approximation of how many leaks were reclassified.

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LEAK CLASSIFICATION

**Three classes
of leaks:**

There are three classes of leaks: Class 1, 2, and 3. Each class is defined below with examples for each.

The definitions of each class leak may not cover all possible conditions found in the field. Any leak may be reclassified depending on the actual conditions encountered.

Class 1

Class 1 refers to any leak creating a hazardous or potentially hazardous condition which could involve injury, loss of life or property damage.

The following conditions represent Class 1 leaks:

- A. Any indication of gas adjacent to a building foundation either on the inside or outside.
- B. Any indication of gas in a manhole greater than 4% gas in air (80% Lower Explosive Limit) which cannot be lowered by venting to the atmosphere.
- C. Any leak where concentration of gas greater than 75% gas in air is maintained in a barhole within a ten foot radius. (May not apply in rural areas.)
- D. Any broken main or service regardless of location.

Class 2

Class 2 refers to any leak that is non-hazardous at the time of detection but repairs should be scheduled within a definite time period.

The following conditions represent Class 2 leaks:

- A. Any leak where gas concentration in a barhole is constant on the % gas in air scale and cannot be pumped down by the sampling procedure. Upon further investigation the gas concentration is constant for ten feet or more parallel to the main.
- B. Any leak on the main or service with a concentration of 50% gas in air or more in a barhole.
- C. Any leak showing readings on the % gas in the air scale on a main or service in an area where street paving and sidewalks are continuous from property line to property line with buildings at those property lines.

BAY STATE GAS/NORTHERN UTILITIES
OPERATING AND MAINTENANCE PROCEDURES

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D. Any gas concentration of 4% gas in air (80% Lower Explosive Limit) or less in a manhole which cannot be diminished by venting to atmosphere.

Class 3 Class 3 refers to a leak which is non-hazardous at the time of detection and can be reasonably expected to remain non-hazardous.

A Class 3 leak has a maximum gas concentration in a barhole below 50% gas in air and no indication of spread toward a building or underground structure, such as sewers or telephone facilities. Ideally, a Class 3 leak should have some natural safeguard, such as natural venting via valve boxes.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-THIRD SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-23-1 Please refer to the June 17, 2005, letter from the Company to the Attorney General regarding overdue discovery responses, p. 2, § 4. List what categories of data are maintained in the Microsoft Access system used by the Brockton operations center for leak reports. For the years 1990 to 2005, produce all reports related to leaks on unprotected bare steel from the Access system. For the years 1990 to 2005, produce all reports related to leaks on unprotected coated steel from the Access system.

Response: The Access system does not maintain reports, but rather maintains data. In 1998, Bay State's Brockton division began populating the computer bare steel and unprotected coated steel leak database using the Lotus Approach database software that was later converted to Microsoft Access database software.

The main purpose of this database is to track the number of leaks in Bay State's existing bare steel and unprotected coated steel mains in Brockton.

The categories of data maintained in the database system beginning in 1999 are: town, street, location, year of pipe installation, size of pipe, and repaired leaks (or clamps). Since 1999 several additional changes were added to the database system and they are: open leaks, points and the "leak clamps" were distributed by year in which they were repaired. The system only provides a database for operations personnel and management to sort, evaluate and review leakage history on particular segments of pipe.

Bay State would be happy to run a query based on the data fields described above at the Attorney General's request. Only pipe that has leaked and has been repaired is in this database; replaced pipe is not. The data in the Access system is used to help make a replacement or operational decision when a segment of pipe becomes a problem or is in conflict with road construction (see Bay State's response to AG-14-4). It is not used to assess historical replacement decisions or to generate reports that might broadly assess system integrity, as is inferred by the question.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-THIRD SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-23-2 Please refer to the June 17, 2005, letter from the Company to the Attorney General regarding overdue discovery responses, p. 2. Why did the Company include all types of steel pipe (bare, coated and protected coated) under the data entry category for bare steel in the WOMS database? When was the decision made to include all types of steel pipe (bare, coated and protected coated) under the category for bare steel? Did the Company ever maintain those different types of pipe materials as separate data fields?

Response: WOMs was originally designed in the early 1990's to provide a database of system information that would allow Bay State to capture in one place all of the information necessary to complete the annual 7100 DOT, and to manage our distribution system successfully. The fields that were constructed in WOMS in large measure reflect the reporting requirements mandated by DOT and have been used since that time to submit the required data annually.

At no point has the Company had a single electronic database identifying an inventory of the steel pipe by type in the system, so it has not maintained "different types of pipe materials as separate data fields." Please remember that WOMS is not a plant investment database, it is a work order database. It only maintains information related to pipe that has been exposed for repair.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-THIRD SET OF INFORMATION REQUESTS FROM THE ATTORNEY
GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-23-6 Please identify by name, address, telephone number the contractor that was responsible for installing the unprotected coated steel mains that Company has replaced since 1990 in Brockton and Lawrence, and identify by name, address, telephone number the contractor that was responsible for the replacing these mains. Produce copies of the contract for the installation services.

Response: The only location where the identifying information of any particular contractor would be retained (and in many cases during the pre-1971 time period, coated steel mains and services were installed by Company employees) would be on the original project work order. That said, the work orders are not sorted by pipe type, or by cathodic protection status, nor are they maintained in any database. Therefore, searching for an unprotected coated steel installation work order for an unidentified section of unprotected pipe anywhere in Brockton and Lawrence areas would require an enormous manual effort and many manhours and would be extremely burdensome to undertake.

Bay State does not have copies of installation contracts from the 1950's and 1960's when the coated unprotected pipe was installed.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FOURTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-24-23 Refer to the Company's response to DTE-7-1. Please provide the annual contributions Bay State made as part of the East Coast Distributors Fund to Gas Research Institute/Gas Technology Institute from 1998 to August 2004.

Response: Annual funding levels for Bay State as part of the GRI - East Coast Distributor's (ECD) Settlement Agreement are detailed in Table AG-24-23. Funding under this Settlement Agreement did not commence until 1999.

TABLE AG-24-23

Bay State Gas - ECD R&D Funding Levels

Year	Dollars
1999	\$469,992
2000	\$331,039
2001	\$233,958
2002	\$209,906
2003	\$209,906
2004	\$218,652

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FOURTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-24-24 Refer to the Company's response to DTE-7-2. Please provide a copy of the settlement agreement, including any exhibits, amendments and attachments, between East Coast Distributors and the Gas Research Institute.

Response: A copy of the GRI – East Coast Distributors Settlement Agreement is provided in Attachment AG-24-24.

**AGREEMENT BETWEEN THE
EAST COAST DISTRIBUTORS AND THE GAS RESEARCH INSTITUTE
RESOLVING ALL OUTSTANDING ISSUES**

This **AGREEMENT** is made and entered into this 3rd day of August, 1999, by and between certain East Coast Distributors listed on Exhibit A hereto ("East Coast Distributors") and the Gas Research Institute ("GRI").

CONDITIONS PRECEDENT

The East Coast Distributors have challenged the current GRI funding process based on their analysis that member LDCs pay approximately 19% of GRI's surcharge collections while representing only approximately 10% of gas throughput. The East Coast Distributors have sought means (primarily through refunds) to mitigate this claimed imbalance. The East Coast Distributors have petitioned for review of the Federal Energy Regulatory Commission's orders approving the settlement establishing GRI's current funding mechanism.

GRI seeks to define methods to increase the satisfaction of the East Coast Distributors with GRI funding processes and to settle the East Coast petition for review.

GRI has recently adopted a new "customer choice" model that provides distributors a greater influence over the application of revenues generated by the FERC-approved surcharge they pay to interstate pipelines.

In light of the foregoing, and with the specific intention of resolving all outstanding issues between them, the East Coast Distributors and GRI hereby agree as follows:

ARTICLE I

GRI hereby agrees to establish an annual East Coast Research & Development ("R&D") fund at levels commensurate with agreed upon estimates of collections associated with GRI surcharge collections to be paid by the East Coast Distributors. The annual level of the East Coast R&D fund will be the amount that East Coast Distributors are projected to pay toward the LDC-related budget according to the current GRI funding mechanism.

For 1999, the East Coast Distributors are projected to pay an estimated \$9.9 million toward GRI's LDC-related R&D budget. The East Coast R&D fund for 1999 therefore will be established at the level of \$9.9 million. After 1999, the East Coast R&D fund will continue to equal the East Coast Distributors' contribution toward GRI's LDC-related R&D budget, using the ratio of proposed LDC-related budgets to total FERC-related budgets, or 42%, whichever is greater, and a 19% East Coast Distributors' share. It is anticipated that East Coast R&D funds after 1999 will be at levels

somewhat lower than the 1999 level commensurate with lower overall R&D funding through surcharge collections.

Funding from the East Coast R&D fund will be allocated to specific projects in one of two ways: (1) by a governing body established by the East Coast Distributors or (2) by individual members of the East Coast Distributors who may elect to choose the research projects to be supported by their share of the East Coast R&D fund as set forth on Exhibit A. GRI agrees to provide funding for specific research/demonstration projects, including field demonstration/deployment activities, to be designated by the member company.

Funds not expended in each year will be carried over into the following year and it is intended that such carryover will survive the term of the FERC settlement. GRI agrees to provide these funds directly to member company project expenses including travel, material, labor, and contractors as appropriate.

It is understood and agreed that funding for projects chosen by the East Coast Distributors will bear project management and administrative costs at the FERC-approved level of such GRI activities commensurate with the level of activities actually performed by GRI, and that projects selected by East Coast Distributors must meet all applicable FERC settlement definitions and applicable FERC regulations.

Furthermore, East Coast R&D funds may be invested in existing GRI FERC-approved core programs or in specific new projects as defined by the governing body or individual members of the East Coast Distributors and filed with the FERC-approved program. Input from the East Coast Distributors will be timed to coincide with GRI's FERC program and filing schedule to seek approval of new projects. It is also understood that intellectual property will be owned by GRI and the results of projects funded through the East Coast R&D fund will be made available to all GRI members. It is also understood that revenues generated by detailed research data, results, and any intellectual property, developed using East Coast R&D funds will be proportionately shared between the East Coast R&D fund and GRI for the remaining term of the FERC settlement.

East Coast Distributors hereto as a group shall be entitled to a representative on the GRI Board of Directors for the remaining term of the FERC settlement.

EXHIBIT A

EAST COAST DISTRIBUTORS

<u>Company</u>	<u>Percentage</u>
Bay State Gas Company/Northern Utilities, Inc.	5.48
Berkshire Gas Company	0.45
Boston Gas Company	7.06
City of Holyoke Massachusetts Gas & Electric Department	0.21
City of Westfield Gas and Electric Company	0.08
Colonial Gas Company	1.79
Commonwealth Gas Company	1.40
Connecticut Natural Gas Corporation	2.91
Delmarva Power & Light Company	1.77
Energy North Natural Gas, Inc.	0.84
Essex County Gas Company	0.44
Fall River Gas Company	0.41
New Jersey Natural Gas Company	3.16
New York State Electric & Gas Company	2.93
Niagara Mohawk Power Corporation	12.65
NUI Corporation	8.27
PECO Energy Distribution Company	4.65
Philadelphia Gas Works	4.92
Providence Gas Company	1.61
Public Service Electric & Gas Company	22.18
Southern Connecticut Gas Company	2.48
South Jersey Gas Company	3.60
Valley Gas Company Light Company	0.50
Washington Gas Light Company	<u>10.14</u>
Total Participating Companies:	<u>100.00</u>

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FOURTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Stephen H. Bryant, President

AG-24-28 Refer to the Company's response to AG-3-32. The Company states that it has specific concerns regarding Itron's commitment to the Metscan product line. Identify what the Company's concerns were and explain what the phrase "commitment to the Metscan product line" means as it is used in this response.

Response: The Company was concerned in 2000 that Itron might discontinue manufacturing the Metscan automated meter reading devices, since the market for such devices had shifted heavily toward radio technology.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FOURTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Stephen H. Bryant, President

AG-24-29 Refer to the Attachment AG-3-32(c). Itron states that it will continue to provide customer support for the existing Metscan, MDMS/MDCC system until December 2006.

(a) Identify the type of customer support services Itron provides for the Metscan systems.

(b) Provide all correspondence between the Company and Itron relating to the customer support services provided by Itron for the Metscan systems.

(c) Identify all costs associated with Itron's customer support services relating to the Metscan systems.

(d) Explain how costs relating to Itron's customer support services are accounted for and recovered by the Company.

Response: (a) Itron continues to provide technical support for the Metscan billing software, including access to a help desk and to technical troubleshooting assistance.

(b) The Company has no correspondence with Itron relating to the customer support services provided by Itron for the Metscan systems.

(c) Metscan provides support for the Metscan system on a no charge basis until December 2006.

(d) See the Company's response to (c) above.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FOURTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Stephen H. Bryant, President

AG-24-30 Provide all correspondence and other documentation relating to all customer support services Metscan provided to the Company prior to Itron's acquisition of Metscan in 1995.

Response: The Company has no documentation in its possession related to customer support services that were provided by Metscan to the Company prior to Itron's acquisition of Metscan in 1995.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FIFTH SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-25-3 Produce copies of all DOT 7100 system reports submitted to DOT from 1990 to 1994. Produce all worksheets for DOT 7100 system reports from 1990 to 2005.

Response: Attached are copies of all DOT F7100 system reports submitted to DOT from 1990 through 2004:

- Attachment AG-25-3 (a) (1990)
- Attachment AG-25-3 (b) (1991)
- Attachment AG-25-3 (c) (1992)
- Attachment AG-25-3 (d) (1993)
- Attachment AG-25-3 (e) (1994 - Supp)
- Attachment AG-25-3 (f) (1994)
- Attachment AG-25-3 (g) (1995)
- Attachment AG-25-3 (h) (1996)
- Attachment AG-25-3 (i) (1997)
- Attachment AG-25-3 (j) (1998)
- Attachment AG-25-3 (k) (1999)
- Attachment AG-25-3 (l) (2000)
- Attachment AG-25-3 (m) (2001)
- Attachment AG-25-3 (n) (2002)
- Attachment AG-25-3 (o) (2003)
- Attachment AG-25-3 (p) (2004)

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-FIFTH SET OF INFORMATION REQUESTS FROM ATTORNEY GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: Danny G. Cote, General Manager

AG-25-7 In any of the Company services areas, is the Company experiencing an unusually high rate of leaks on any of its services? If "yes", identify the service area and quantify the number and type of services involved. Produce all documents that support the conclusion that the Company is experiencing an unusually high rate of leaks on any of its services.

Response: The Company would not characterize the leak rate on its services in any location as "unusually high". The Company makes this judgment based on an analysis of the following data:

- Attachment AG-25-7 (a) page 3 shows that the overall number of services in the Bay State system in 1885 was 180,783, while the number of service leaks was 1058, a leak rate of 5.8 leaks per thousand services. In 2004 there were 242,740 services in the Bay State system while the number of service leaks was 1567, a leak rate of 6.5 leaks per thousand services. While this is an increase in leaks per thousand services over the 20-year period of approximately 12%, based on its engineering, operational and management experience, the Company would not characterize it as "unusually high".
- Attachment AG-25-7 (a) page 3 shows that the overall number of services in the Bay State system in 1885 was 180,783 while the number of service leaks was 1058, a leak rate of 5.8 per thousand services. In 2004 there were 242,740 services in the Bay State system while the number of service leaks was 1567, a leak rate of 6.45 per thousand services. While this is a slight increase in leak rates over the 20-year period, based on its engineering, operational and management experience, the Company would not characterize it as "unusually high".
- Attachment AG-25-7 (a) page 1 shows that the overall number of services in the Bay State Springfield system in 1885 was 69,995 while the number of service leaks was 498, a leak rate of 7.1 per thousand services. In 2004 there were 87,277 services in the Bay State system while the number of service leaks was 586, a leak rate of 6.7 per thousand services. A slight decrease in overall leakage is shown.
- Attachment AG-25-7 (a) page 2 shows that the overall number of services in the Bay State Lawrence system in 1885 was 26,926

while the number of service leaks was 96, a leak rate of 3.6 per thousand services. In 2004, there were 32,159 services in the Bay State system, while the number of service leaks was 242, a leak rate of 7.5 per thousand services. While this constituted a significant increase in service leakage per thousand for the Lawrence system, compared to the historic leak rates in the other locations this is only slightly above the average. Further, this does not appear to be a case where the current leakage rate is “unusually high” but rather that the rate in 1985 was unusually low, at least as compared to the other locations.

- Attachment AG-25-7 (a) page 4 shows that the overall number of services in the Bay State Brockton system in 1885 was 83,863 while the number of service leaks was 464, a leak rate of 5.5 per thousand services. In 2004 there were 123,304 services in the Bay State system while the number of service leaks was 739, a leak rate of 6.0 per thousand services. Once again, a slight increase in overall service leakage rates per thousand is shown, but Bay State would not characterize these rates as “unusually high.”

Overall the data does not suggest dramatic or severe increases in the rate of service leakage per thousand over the 20-year period that was the basis of the analysis. The 12% increase in service leaks per thousand however is in particular contrast to the leak rate on bare and coated unprotected steel mains, where during the same 20 year period the overall Bay State leak rate per mile increased by over 500%, and the Brockton bare and coated unprotected steel main leak rate increased by approximately 750%.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
TWENTY-SEVENTH SET OF INFORMATION REQUESTS FROM ATTORNEY
GENERAL
D. T. E. 05-27

Date: June 29, 2005

Responsible: John E. Skirtich, Consultant (Revenue Requirements)

AG-27-7 Referring to Exhibit BSG/JES-1, Workpaper JES-6, page 2, please provide the workpapers, calculations, formulas, assumptions and supporting documentation used to determine line 3, Annual Wages as of Dec. 2004.

Response: The supporting information is contained on the enclosed CD. The CD contains an Excel file for each of the five unions. The annualized wages summed in the lowest row of each Excel file are equal to the totals shown on Workpaper JES-6, page 2 of 31.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
ELEVENTH SET OF INFORMATION REQUESTS FROM THE D.T.E.
D. T. E. 05-27

Date: June 29, 2005

Responsible: John Skirtich, Consultant (Revenue Requirements)

AG-27-10 Referring to the response to Information Request AG-3-21, please indicate the reasons for the Account 904-03 – Bad Debt Accrual – Special account. Please also identify the customer or groups of customers associated with the “Special Accrual.”

Response: The 904-03 account was created to segregate uncollectible issues that are not included in the normal uncollectible calculations described in the response to DTE-9-1. Once the issues become more certain, they are reversed from 904-03 and included in the calculation as described in DTE-9-1. All customers groups could be included in 904-03.